



GSD Industrial Co.,Ltd



**CP**

沉水式污物(泥)泵

**CP submersible solid handling pump**



# CP 沉水式污物(泥)泵

## CP submersible solid handling pump

### 用途

- 废水扬升站
- 都市废水处理厂
- 一楼化粪池排水系统
- 农畜牧业废水处理系统
- 医院、学校、社区等生活废水处理系统
- 食品、造纸、采矿、纺织、皮革、化学工厂等工业之水处理系统
- 净水处理系统

### 特点

- **电动机**  
鼠笼式感应电动机，F级绝缘，防护等级IP68。
- **不阻塞叶轮**  
采用最新无堵塞理论设计的叶轮，流道宽大，水流畅通，污物容易通过，效率高。  
所有叶轮均经动、静平衡校正，最大程度的减少了振动和噪音，运转平稳，寿命长。
- **机械密封**  
机械密封的作用是阻绝抽送介质与电动机部分接触，双机械密封串联相互独立工作，为电动机提供双重保护。
- **自动着脱装置（选用配备）**  
使泵浦安装、保养、修护迅速容易，毋须先清除桶槽污水。
- **测漏检知器**  
在油室内加装测漏检知器，可检测因密封不良或机械密封损坏造成之洩漏（<15kW选用配备，≥15kW标准配备）。大功率水泵在接线盒和电机腔内加装测漏检知器，可对接线盒和电机腔内的洩漏发出报警信号，使控制系统对泵实施保护（非标准配备，≥132kW可选配）。
- **过热保护器**  
在电动机中加装过热保护器，对过载、温升等状况自动进行检测，避免由于电动机过热造成电机烧毁（<15kW选用配备，≥15kW标准配备）。  
在轴承中加装过热保护器，当轴承温度升至断开温度时，保护器自动切断电源，起到保护轴承的作用（非标准配备，≥18.5kW可选配）。
- **水冷夹套（选用配备）**  
泵工作时利用泵腔内压力使液体连续进入水冷夹套与电动机外壳的空间以带走电动机产生的热量，从而保证水泵在低水位正常工作（≥18.5kW可选配）。

**Remark:**

Starting method for pump's power rating 0.75kW ~ 3.7kW - D.O.L  
Starting method for pump's power rating 5.5kW ~ 45kW - Auto-Trans or Soft-Starter  
Starting method for pump's power rating 55kW & Above - Inverter

### Application

- Wastewater lift station.
- Municipal wastewater treatment plant.
- Building wastewater treatment system.
- Livestock animal nusbardy wastewater treatment system.
- Hospital, school, community, etc. wastewater treatment system.
- Food, paper, mining, textile, leather, chemical industry, etc. wastewater treatment system.
- Water purification system.

### Features

- **Motor**  
Squirrel-cage, induction motors are F class insulation, motor protection grade is IP68.
- **Non-clog impeller**  
Well statically & dynamically balanced Non-Clog impeller is designed to allow sizable spherical solids to pass the flow passage easily without clogging. It adopts rigorous technics so that vibration and noise can be farthest reduced.
- **Mechanical seal**  
The mechanical seals protect the motor from contacting the pumping liquids. Two seals are in series with each other and individually work to provide the motor with a dual protection.
- **Auto-setter (options)**  
To allow pump for easy installation, maintenance & reparation, as it is no need to empty the tank first.
- **Leakage detector**  
Built-in leakage detector in the oil chamber can detect leakage from the damage of the mechanical seal. (Less than 15 kW options, No less than 15kW standard).  
Built-in leakage detector in the wiring box and motor cavity of large power pumps can check if a leakage in it. The leakage detector offers pump an automatic protection (Not standard, No less than 132 kW options)
- **Heat-protector**  
Built-in heat protector in motor, can prevent the motor from burning out, overload & overheating. (Less than 15 kW options, No less than 15 kW standard).  
Built-in heat protector in bearing, when the bearing is abnormal and the temperature rises to disconneting temperature, the protector automatically cut off power supply to protect the bearing. (Not standard, no less than 18.5 kW options).
- **Cooling house (options)**  
Pumps make use of inner pressure of pump cavity to make liquid continually entering in space between cooling house and motor outer, to take away the heat of the motor. to make sure the regular work of the pump in low water level (No less than 18.5 kW options).



## 型号说明 Type description

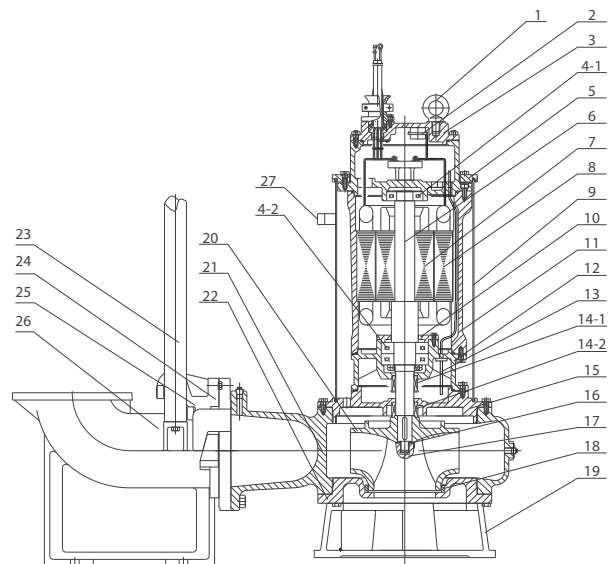
CP - 5 37 - 300

|    |     |    |       |           |
|----|-----|----|-------|-----------|
| CP | - 5 | 37 | - 300 |           |
|    |     |    |       | 出口口径      |
|    |     |    |       | 额定功率      |
|    |     |    |       | 频率        |
|    |     |    |       | 沉水式污物(泥)泵 |

|  |                                 |
|--|---------------------------------|
|  | Outlet diameter (mm)            |
|  | Rated power (kW)                |
|  | Frequency 5: 50Hz               |
|  | Submersible solid handling pump |

## 结构简图 Construction

| NO.  | 名称    | Name                 | 材质 Material |         |
|------|-------|----------------------|-------------|---------|
|      |       |                      | GB          | JIS     |
| 1    | 吊环    | Neck bolt            | 0Cr18Ni9    | SUS304  |
| 2    | 过热保护器 | Heat-Protector       | -           | -       |
| 3    | 马达盖   | Motor cover          | HT200       | FC200   |
| 4-1  | 轴承    | Bearing              | -           | -       |
| 4-2  | 轴承    | Bearing              | -           | -       |
| 5    | 水冷套法兰 | Cooling house flange | Q235A       | SS400   |
| 6    | 主轴    | Shaft                | 2Cr13       | SUS420  |
| 7    | 转子    | Rotor                | -           | -       |
| 8    | 定子    | Stator               | -           | -       |
| 9    | 水冷夹套  | Cooling house        | Q235A       | SS400   |
| 10   | 轴承压盖  | Bearing cover        | HT200       | FC200   |
| 11   | 马达本体  | Motor casing         | HT200       | FC200   |
| 12   | 中承座   | Bracket              | HT200       | FC200   |
| 13   | 漏水检知器 | Leakage detector     | -           | -       |
| 14-1 | 机械密封  | Mechanical seal      | C-Al2O3     | C-Al2O3 |
| 14-2 | 机械密封  | Mechanical seal      | SiC-SiC     | SiC-SiC |
| 15   | 油箱盖   | Oil cover            | HT200       | FC200   |
| 16   | 止退垫圈  | Washer               | 0Cr18Ni9    | SUS304  |
| 17   | 叶轮螺母  | Impeller nut         | 0Cr18Ni9    | SUS304  |
| 18   | 密封环   | Seal-ring            | ZCuSn10Pb5  | LBC2    |
| 19   | 滤底座   | Strainer             | HT200       | FC200   |
| 20   | 叶轮    | Impeller             | HT200       | FC200   |
| 21   | 泵体    | Pump casing          | HT200       | FC200   |
| 22   | 泵体底盖  | Bottom cover         | HT200       | FC200   |
| 23   | 引导管   | Pail piping          | Q235A       | SS400   |
| 24   | 配合凸缘  | Flange setter        | HT200       | FC200   |
| 25   | 引导板   | Slide                | HT200       | FC200   |
| 26   | 着脱    | Duckfoot             | HT200       | FC200   |
| 27   | 出水口   | Discharge            | Q235A       | SS400   |



不同机型结构略有不同，可根据需求采用不同材质。  
 Different model has a little difference,  
 Materials can be selected according to the requirement of the customer.





## 性能参数 Performance parameters

(2P)

| 泵型号<br>Pump model | 行业型号<br>Pump model | 转速<br>Speed<br>(r/min) | 流量<br>Capacity<br>(m <sup>3</sup> /h) | 扬程<br>Head<br>(m) | 效率<br>Eff.<br>$\eta$ (%) | 电机功率<br>Motor power<br>(kw) | 口径<br>Dia.<br>(mm) | 泵重量<br>Weight<br>(kg) |
|-------------------|--------------------|------------------------|---------------------------------------|-------------------|--------------------------|-----------------------------|--------------------|-----------------------|
| CP50.75-50        | 50QW-10-10-0.75    | 2840                   | 10                                    | 10                | 48                       | 0.75                        | 50                 | 30                    |
| CP51.5-50         | 50QW-18-15-1.5     | 2840                   | 18                                    | 15                | 60                       | 1.5                         | 50                 | 36                    |
| CP52.2-50(I)      | 50QW-6-25-2.2      | 2840                   | 6                                     | 25                | 30                       | 2.2                         | 50                 | 44                    |
| CP52.2-50         | 50QW-15-22-2.2     | 2840                   | 15                                    | 22                | 53                       | 2.2                         | 50                 | 50                    |
| CP53.7-50         | 50QW-18-30-4       | 2840                   | 18                                    | 30                | 50                       | 4                           | 50                 | 68                    |
| CP55.5-50         | 50QW-15-40-5.5     | 2860                   | 15                                    | 40                | 43                       | 5.5                         | 50                 | 79                    |
| CP53.7-65         | 65QW-30-22-4       | 2840                   | 30                                    | 22                | 62                       | 4                           | 65                 | 66                    |
| CP55.5-65         | 65QW-28-30-5.5     | 2860                   | 28                                    | 30                | 58                       | 5.5                         | 65                 | 72                    |
| CP57.5-65         | 65QW-25-40-7.5     | 2860                   | 25                                    | 40                | 45                       | 7.5                         | 65                 | 126                   |
| CP55.5-80         | 80QW-35-22-5.5     | 2860                   | 35                                    | 22                | 55                       | 5.5                         | 80                 | 87                    |
| CP57.5-80(I)      | 80QW-55-22-7.5     | 2860                   | 55                                    | 22                | 56                       | 7.5                         | 80                 | 132                   |
| CP57.5-80         | 80QW-38-30-7.5     | 2860                   | 38                                    | 30                | 53                       | 7.5                         | 80                 | 129                   |
| CP511-80          | 80QW-45-40-11      | 2860                   | 45                                    | 40                | 60                       | 11                          | 80                 | 197                   |
| CP515-80          | 80QW-50-45-15      | 2860                   | 50                                    | 45                | 51                       | 15                          | 80                 | 209                   |
| CP511-100         | 100QW-65-30-11     | 2860                   | 65                                    | 30                | 66                       | 11                          | 100                | 205                   |
| CP515-100         | 100QW-80-30-15     | 2860                   | 80                                    | 30                | 58                       | 15                          | 100                | 223                   |

(4P/6P/8P)

| 泵型号<br>Pump model | 行业型号<br>Pump model | 转速<br>Speed<br>(r/min) | 流量<br>Capacity<br>(m <sup>3</sup> /h) | 扬程<br>Head<br>(m) | 效率<br>Eff.<br>$\eta$ (%) | 电机功率<br>Motor power<br>(kw) | 口径<br>Dia.<br>(mm) | 泵重量<br>Weight<br>(kg) |
|-------------------|--------------------|------------------------|---------------------------------------|-------------------|--------------------------|-----------------------------|--------------------|-----------------------|
| CP50.75-50        | 50QW10-10-0.75     | 1450                   | 10                                    | 10                | 50                       | 0.75                        | 50                 | 46                    |
| CP51.5-65(I)      | 65QW18-14-1.5      | 1450                   | 18                                    | 14                | 50                       | 1.5                         | 65                 | 66                    |
| CP51.5-65         | 65QW25-10-1.5      | 1450                   | 25                                    | 10                | 60                       | 1.5                         | 65                 | 60                    |
| CP52.2-65         | 65QW23-15-2.2      | 1450                   | 23                                    | 15                | 60                       | 2.2                         | 65                 | 73                    |
| CP53.7-65         | 65QW30-18-4        | 1450                   | 30                                    | 18                | 55                       | 4                           | 65                 | 96                    |
| CP55.5-65         | 65QW26-26-5.5      | 1450                   | 26                                    | 26                | 50                       | 5.5                         | 65                 | 160                   |
| CP50.75-80        | 50QW-10-10-0.75    | 1450                   | 18                                    | 8                 | 53                       | 0.75                        | 80                 | 48                    |
| CP51.5-80         | 80QW30-8.5-1.5     | 1450                   | 30                                    | 8.5               | 60                       | 1.5                         | 80                 | 61                    |
| CP51.5-100        | 80QW30-8.5-1.5     | 1450                   | 40                                    | 8                 | 66                       | 1.5                         | 100                | 64                    |
| CP52.2-80         | 80QW40-10-2.2      | 1450                   | 40                                    | 10                | 60                       | 2.2                         | 80                 | 73                    |
| CP53.7-80         | 80QW45-15-4        | 1450                   | 45                                    | 15                | 62                       | 4                           | 80                 | 104                   |
| CP55.5-80         | 80QW35-22-5.5      | 1450                   | 35                                    | 22                | 55                       | 5.5                         | 80                 | 147                   |
| CP57.5-80(I)      | 80QW36-30-7.5      | 1450                   | 36                                    | 30                | 50                       | 7.5                         | 80                 | 193                   |
| CP57.5-80         | 80QW55-22-7.5      | 1450                   | 55                                    | 22                | 62                       | 7.5                         | 80                 | 172                   |
| CP511-80          | 80QW45-40-11       | 1450                   | 45                                    | 40                | 60                       | 11                          | 80                 | 300                   |
| CP515-80          | 80QW50-45-15       | 1450                   | 50                                    | 45                | 51                       | 15                          | 80                 | 260                   |
| CP53.7-100        | 100QW75-10-4       | 1450                   | 75                                    | 10                | 70                       | 4                           | 100                | 104                   |
| CP55.5-100        | 100QW95-12-5.5     | 1450                   | 95                                    | 12                | 68                       | 5.5                         | 100                | 147                   |
| CP57.5-100        | 100QW100-15-7.5    | 1450                   | 100                                   | 15                | 70                       | 7.5                         | 100                | 172                   |
| CP511-100         | 100QW90-22-11      | 1450                   | 90                                    | 22                | 68                       | 11                          | 100                | 250                   |
| CP515-100         | 100QW100-26-15     | 1450                   | 100                                   | 26                | 65                       | 15                          | 100                | 272                   |
| CP519-100         | 100QW110-30-18.5   | 1450                   | 110                                   | 30                | 66                       | 18.5                        | 100                | 450                   |
| CP53.7-150        | 150QW130-6-4       | 1450                   | 130                                   | 6                 | 72                       | 4                           | 150                | 140                   |
| CP55.5-150        | 150QW180-6-5.5     | 1450                   | 180                                   | 6                 | 73                       | 5.5                         | 150                | 169                   |
| CP57.5-150        | 150QW130-12-7.5    | 1450                   | 130                                   | 12                | 70                       | 7.5                         | 150                | 182                   |
| CP511-150         | 150QW145-15-11     | 1450                   | 145                                   | 15                | 72                       | 11                          | 150                | 248                   |
| CP515-150(I)      | 150QW130-22-15     | 1450                   | 130                                   | 22                | 70                       | 15                          | 150                | 245                   |
| CP515-150         | 150QW200-15-15     | 1450                   | 200                                   | 15                | 74                       | 15                          | 150                | 267                   |
| CP519-150         | 150QW170-22-18.5   | 1450                   | 170                                   | 22                | 73                       | 18.5                        | 150                | 530                   |
| CP522-150(I)      | 150QW135-30-22     | 1450                   | 135                                   | 30                | 69                       | 22                          | 150                | 500                   |
| CP522-150         | 150QW200-22-22     | 1450                   | 200                                   | 22                | 73                       | 22                          | 150                | 380                   |
| CP57.5-200        | 200QW250-6-7.5     | 1450                   | 250                                   | 6                 | 72                       | 7.5                         | 200                | 230                   |



## 性能参数 Performance parameters

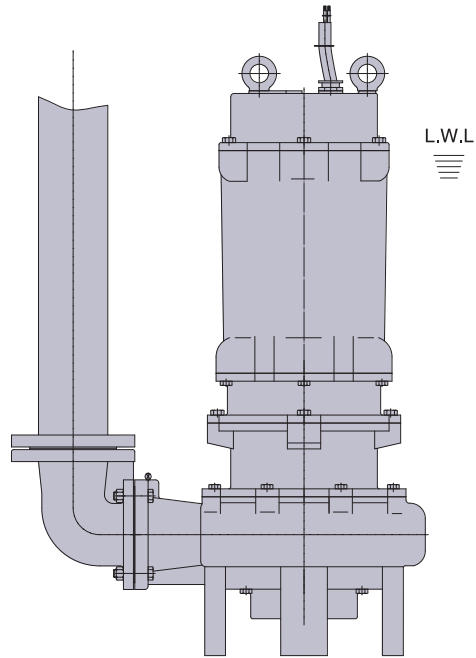
(4P/6P/8P)

| 泵型号<br>Pump model | 行业型号<br>Pump model | 转速<br>Speed<br>(r/min) | 流量<br>Capacity<br>(m <sup>3</sup> /h) | 扬程<br>Head<br>(m) | 效率<br>Eff.<br>η (%) | 电机功率<br>Motor power<br>(kw) | 口径<br>Dia.<br>(mm) | 泵重量<br>Weight<br>(kg) |
|-------------------|--------------------|------------------------|---------------------------------------|-------------------|---------------------|-----------------------------|--------------------|-----------------------|
| CP511-200         | 200QW210-10-11     | 1450                   | 210                                   | 10                | 70                  | 11                          | 200                | 287                   |
| CP515-200         | 200QW300-10-15     | 1450                   | 300                                   | 10                | 72                  | 15                          | 200                | 322                   |
| CP519-200         | 200QW250-15-18.5   | 1450                   | 250                                   | 15                | 75                  | 18.5                        | 200                | 450                   |
| CP522-200(I)      | 200QW450-10-22     | 1450                   | 450                                   | 10                | 72                  | 22                          | 200                | 380                   |
| CP522-200         | 200QW250-18-22     | 1450                   | 250                                   | 18                | 72                  | 22                          | 200                | 532                   |
| CP530-200(I)      | 200QW280-22-30     | 980                    | 280                                   | 22                | 74                  | 30                          | 200                | 900                   |
| CP530-200         | 200QW420-15-30     | 980                    | 420                                   | 15                | 76                  | 30                          | 200                | 713                   |
| CP537-200(I)      | 200QW280-26-37     | 980                    | 280                                   | 26                | 70                  | 37                          | 200                | 739                   |
| CP537-200         | 200QW350-22-37     | 980                    | 350                                   | 22                | 75                  | 37                          | 200                | 730                   |
| CP545-200         | 200QW300-30-45     | 980                    | 300                                   | 30                | 72                  | 45                          | 200                | 1050                  |
| CP555-200         | 200QW250-40-55     | 980                    | 250                                   | 40                | 65                  | 55                          | 200                | 1015                  |
| CP575-200         | 200QW350-40-75     | 980                    | 350                                   | 40                | 70                  | 75                          | 200                | 1650                  |
| CP515-250         | 250QW500-6-15      | 1450                   | 500                                   | 6                 | 71                  | 15                          | 250                | 380                   |
| CP519-250(I)      | 250QW350-10-18.5   | 1450                   | 350                                   | 10                | 71                  | 18.5                        | 250                | 550                   |
| CP519-250         | 250QW600-6-18.5    | 1450                   | 600                                   | 6                 | 71                  | 18.5                        | 250                | 490                   |
| CP522-250         | 250QW700-6-22      | 1450                   | 700                                   | 6                 | 73                  | 22                          | 250                | 630                   |
| CP530-250         | 250QW460-13-30     | 980                    | 460                                   | 13                | 75                  | 30                          | 250                | 738                   |
| CP537-250         | 250QW500-15-37     | 980                    | 500                                   | 15                | 77                  | 37                          | 250                | 804                   |
| CP545-250         | 250QW420-22-45     | 980                    | 420                                   | 22                | 76                  | 45                          | 250                | 938                   |
| CP555-250         | 250QW400-30-55     | 980                    | 400                                   | 30                | 72                  | 55                          | 250                | 976                   |
| CP575-250         | 250QW500-30-75     | 980                    | 500                                   | 30                | 76                  | 75                          | 250                | 1650                  |
| CP590-250         | 250QW600-30-90     | 990                    | 600                                   | 30                | 70                  | 90                          | 250                | 2000                  |
| CP5110-250        | 250QW500-40-110    | 990                    | 500                                   | 40                | 73                  | 110                         | 250                | 2200                  |
| CP530-300         | 300QW600-10-30     | 980                    | 600                                   | 10                | 75                  | 30                          | 300                | 755                   |
| CP537-300         | 300QW750-10-37     | 980                    | 750                                   | 10                | 77                  | 37                          | 300                | 795                   |
| CP545-300         | 300QW600-15-45     | 980                    | 600                                   | 15                | 78                  | 45                          | 300                | 985                   |
| CP555-300         | 300QW520-22-55     | 980                    | 520                                   | 22                | 75                  | 55                          | 300                | 982                   |
| CP575-300         | 300QW700-22-75     | 980                    | 700                                   | 22                | 78                  | 75                          | 300                | 1750                  |
| CP590-300         | 300QW850-22-90     | 980                    | 850                                   | 22                | 79                  | 90                          | 300                | 1800                  |
| CP5110-300        | 300QW950-24-110    | 990                    | 950                                   | 24                | 80                  | 110                         | 300                | 2200                  |
| CP530-350         | 350QW1000-6-30     | 980                    | 1000                                  | 6                 | 75                  | 30                          | 350                | 785                   |
| CP537-350         | 350QW1300-6-37     | 980                    | 1300                                  | 6                 | 77                  | 37                          | 350                | 804                   |
| CP545-350         | 350QW900-10-45     | 980                    | 900                                   | 10                | 75                  | 45                          | 350                | 1000                  |
| CP555-350         | 350QW1100-10-55    | 980                    | 1100                                  | 10                | 75                  | 55                          | 350                | 1115                  |
| CP575-350         | 350QW1100-15-75    | 980                    | 1100                                  | 15                | 78                  | 75                          | 350                | 1430                  |
| CP590-350         | 350QW1200-18-90    | 990                    | 1200                                  | 18                | 78                  | 90                          | 350                | 2000                  |
| CP5110-350        | 350QW1100-22-110   | 980                    | 1100                                  | 22                | 79                  | 110                         | 350                | 2300                  |
| CP5132-350        | 350QW1300-22-132   | 740                    | 1300                                  | 22                | 67                  | 132                         | 350                | 2300                  |
| CP5160-350        | 350QW1000-36-160   | 740                    | 1000                                  | 36                | 61                  | 160                         | 350                | 2880                  |
| CP575-400         | 400QW1500-10-75    | 990                    | 1500                                  | 10                | 80                  | 75                          | 400                | 1436                  |
| CP590-400         | 400QW2000-10-90    | 980                    | 2000                                  | 10                | 80                  | 90                          | 400                | 1250                  |
| CP5110-400        | 400QW1500-15-110   | 980                    | 1500                                  | 15                | 76                  | 110                         | 400                | 2350                  |
| CP5132-400        | 400QW2000-15-132   | 740                    | 2000                                  | 15                | 72                  | 132                         | 400                | 2520                  |
| CP5160-400        | 400QW1600-22-160   | 740                    | 1600                                  | 22                | 64                  | 160                         | 400                | 2880                  |
| CP5185-400        | 400QW1850-22-185   | 740                    | 1850                                  | 22                | 81                  | 185                         | 400                | 3200                  |
| CP5200-400        | 400QW1500-30-200   | 740                    | 1500                                  | 30                | 67                  | 200                         | 400                | 3850                  |
| CP5250-400        | 400QW1800-30-250   | 740                    | 1800                                  | 30                | 62                  | 250                         | 400                | 4690                  |
| CP5110-450        | 450QW2500-10-110   | 990                    | 2500                                  | 10                | 80                  | 110                         | 450                | 2200                  |
| CP5160-450        | 450QW2400-15-160   | 740                    | 2400                                  | 15                | 79                  | 160                         | 450                | 2950                  |
| CP5185-450        | 450QW2700-15-185   | 740                    | 2700                                  | 15                | 80                  | 185                         | 450                | 3250                  |
| CP5200-450        | 450QW2000-22-200   | 740                    | 2000                                  | 22                | 80                  | 200                         | 450                | 4200                  |

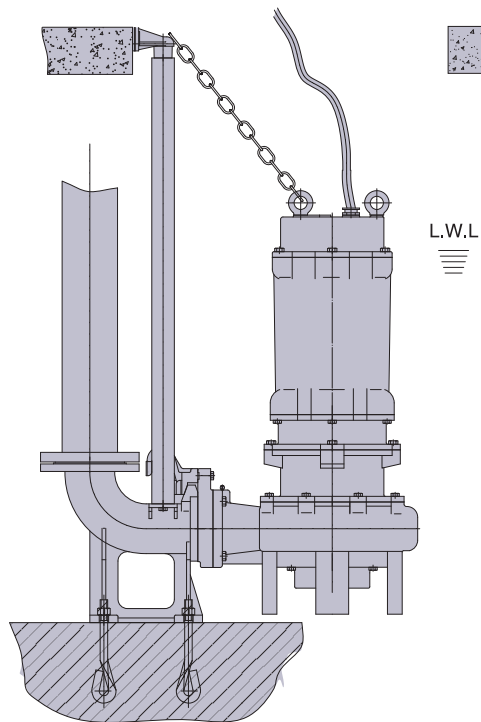


# 安装示意图 Installation sketch map

未附着脱  
without autosetter



附着脱  
with autosetter



# Welcome to ask for the following product catalogue



## Pump series

- Submersible pump series
- On land pump series
- Special pump series
- Fire fighting pump series



## Mixing and flow Propeller series

- Mixer series
- Flow propeller series



## Aerating oxygen Inputing series

- Aerator series
- Disc diffuser series
- Diffuser series



## Blower series

- Three-lobe roots blower series
- Pressure boost roots blower



## Sludge treatment equipment and others

- Solid liquid separation series
- Dissolving equipment
- Conveying equipment



GSD Industrial Co.,Ltd

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We reserve the right to change content without notice.

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